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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,127	08/21/2001	Andrew Augustine Wajs	5683P012	1890

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Andre L Marais
Blakley Sokoloff Taylor & Zafman
7th Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025

EXAMINER	
CHAI, LONGBIT	

ART UNIT	PAPER NUMBER
2131	7

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,127	WAJS, ANDREW AUGUSTINE	
	Examiner	Art Unit	
	Longbit Chai	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. The application is filed on 08/21/2001 but claims the benefit of foreign priority has been made and acknowledged.

2. Therefore, the effective filing date for the subject matter defined in the pending claims in this application is 12/22/1999 on the benefit of foreign priority date.

Claim Objections

3. Claim 10 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependency on claim 8 or claim 9, where the claim 9 should not serve as a basis for another multiple dependent claim 8 which has a multiple dependency on claim 7 or claim 3. See MPEP § 608.01(n).

4. Same objections to claims 11 and 12.

5. Claim 4 is objected to because of the following informalities: "pro5 gram" should be "program". Appropriate correction is required.

6. Any other claims not addressed (are objected) by virtue of their dependency should also be corrected

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1 – 11 and 13 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maillard (Patent Number: EP 0912052 A1), hereinafter referred to as Maillard, in view of Morrison (Patent Number: 5815671), hereinafter referred to as Morrison, and in view of Wendorf (Patent Number: 5469431), hereinafter referred to as Wendorf.

As per claim 1 and 14, Maillard teaches a method for controlling the use of a program signal in a broadcast system, comprising one or more broadcasters and a number of receivers, at least a part of the receivers preferably having a storage medium for storing program signals, wherein the program signal comprises content signals of a first and a second type, wherein the second type of content signals is inserted in time slots in the first type of content signals, wherein at least the first type of content signals is scrambled using control words as scrambling keys to obtain a scrambled program signal and wherein the scrambled program signal is broadcasted together with entitlement control messages (ECM's) containing the control words in an encrypted manner using a second key, wherein decrypting means are provided at each receiver

for retrieving the control words from the ECM's by decrypting the ECM's, and wherein the control words are delivered by the decrypting means for descrambling the program signal (Maillard, see for example, Paragraph [0003], [0033], [0037], [0056] and [0057]).

Maillard does not disclose expressly that at least a plurality of ECM's comprises control information to control the decrypting means in such a manner that at least the time slots for second type of content signals are maintained in the first type of content signals.

Morrison teaches at least a plurality of ECM's comprises control information to control the decrypting means in such a manner that at least the time slots for second type of content signals are maintained in the first type of content signals (Morrison, see for example, Column 2 Line 65 – Column 3 Line 15 and Column 11 Line 11 – 25).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Morrison within the system of Maillard because Morrison teaches an efficient and practical method to insert a variety of services containing commercial or other message services into the routine program material in a relative and real-time manner (Morrison: see for example, Column 1 Line 38 – 50 and Column 11 Line 20 – 25).

Furthermore, Morrison does not explicitly disclose the real-time insertion manner in the form of well-known time-slots of TDM technique.

Wendorf teaches the broadcasting service type of program including ECM can be managed in dynamic time-slot manner (Wendorf, see for example, column 6 Line 45 and column 2 Line 65 – 67).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Wendorf within the system of Maillard as modified because (a) Maillard as modified teaches the insertion of message material into the program material in relative and real-time manner (Morrison: see for example, Column 11 Line 11 – 17), and (b) Wendorf further teaches an efficient and practical method to maximize the total system transmission by re-assigning the time slots and making this time-slot re-assignment user-invisible (Wendorf: see for example, Column 2 Line 64 – 67).

As per claim 2, Maillard as modified teaches the claimed invention as described above (see claim 1). Maillard as modified further teaches a real time clock is operated at the receiver side, wherein the control information of an ECM near the beginning of a time slot for the second type of content signals indicates a delay before a next ECM can be decrypted by the decrypting means (Morrison: see for example, Column 11 Line 20 – 25 and Column 7 Line 49 – 65 and Column 3 Line 5 – 15) & (Wendorf: see for example, Column 2 Line 65 – 67).

As per claim 3 and 15, Maillard as modified teaches the claimed invention as described above (see claims 1 and 14 respectively). Maillard as modified further teaches the ECM's comprise first ECM's for the first type of content signals and second ECM's for the second type of content signals, wherein at least a plurality of first and second ECM's is provided with control information, wherein the decrypting means

checks the control information and delivers decrypted control words of the first or second ECM's in accordance with the control information to descramble content signals of the first or second type, respectively (Maillard, see for example, Paragraph [0033], [0037]) & (Morrison: see for example, Column 2 Line 65 – Column 3 Line 15, Column 7 Line 49 – 65 and Column 3 Line 5 – 15).

As per claim 4, Maillard as modified teaches the claimed invention as described above (see claim 3). Maillard as modified further teaches the control information of said plurality of ECM's comprises timing information, wherein a real time clock is operated at the receiver side, wherein the decrypting means checks the timing information of each ECM by means of the real time clock and continues to deliver control words of the ECM's for descrambling the pro5 gram signal only if the timing information corresponds with the time indication provided by the real time clock (Maillard, see for example, Paragraph [0033], [0037]) & (Morrison: see for example, Column 11 Line 15 – 16, Column 3 Line 5 – 15 and Column 7 Line 59 – 65).

As per claim 5 and 16, Maillard as modified teaches the claimed invention as described above (see claims 4 and 14 respectively). Maillard as modified further teaches a sequence identifier and a minimum delay which should pass before a next ECM should be decrypted are added to said plurality of ECM's as timing information, wherein the decrypting means checks the time passed by means of the real time clock and continues to deliver a next control word only if the time passed corresponds with

the minimum delay (Morrison: see for example, Column 11 Line 20 – 25 and Column 7 Line 49 – 65 and Column 3 Line 5 – 15) & (Wendorf: see for example, Column 2 Line 65 – 67).

As per claim 6, Maillard as modified teaches the claimed invention as described above (see claim 1). Maillard as modified further teaches the control information of the ECM's comprises a sequence identifier including an index number of the previous and/or next ECM's, wherein the decrypting means checks the index number of a received ECM against the expected index number, wherein the control word is only provided if the index number received matches the expected index number (Wendorf: see for example, Column 6 Line 45 and Column 10 Line 50 – 58).

As per claim 7, Maillard as modified teaches the claimed invention as described above (see claim 1). Maillard as modified further teaches the control information of an ECM comprises information on the insertion of the second type of content signals in the first type of content signals (Morrison: see for example, Column 7 Line 49 – 65).

As per claim 8, Maillard as modified teaches the claimed invention as described above (see claim 3). Maillard as modified further teaches at least a plurality of first ECM's provides control information for the decrypting means indicating the decrypting means to use a plurality of second ECM's, wherein the control information may comprise timing information on the time period for using first ECM's and on the time

period for using second ECM's, and information on the point within the first type of content signals for inserting the second type of content signals (Morrison: see for example, Column 7 Line 49 – 65).

As per claim 9, Maillard as modified teaches the claimed invention as described above (see claim 8). Maillard as modified further teaches the second type of content signals comprise content signals with corresponding ECM's representing various contents, wherein the control information of at least a part of said plurality of first ECM's comprises selection identifiers for allowing only a selected content signal with corresponding ECM's to be used for insertion into the first type of content signals as second type of content signals, wherein in particular the selection identifiers select the content signal depending on the time of the day (Morrison: see for example, Column 6 Line 58 – 61, Column 7 Line 5 – 11, and Column 2 Line 55 – 65).

As per claim 10, Maillard as modified teaches the claimed invention as described above (see claim 8). Maillard as modified further teaches the decrypting means enforces the receiver to use all second ECM's corresponding to the time period indicated for using the second ECM's independent of the receiver being tuned to the corresponding program signal source (Morrison: see for example, Column 3 Line 11 – 15).

As per claim 11, Maillard as modified teaches the claimed invention as described above (see claim 1). Maillard as modified further teaches the ECM's are inserted in the

program signal in synchronisation with the change of the control words used to scramble the program signal (Morrison: see for example, Column 3 Line 11 – 15).

As per claim 13, Maillard as modified teaches the claimed invention as described above (see claim 3). Maillard as modified further teaches an ECM of the first ECM's for the first type of content signals comprises control information to switch the decrypting means to deliver only first ECM's for the first type of content signals if the decrypting means indicate a viewing mode allowing the use of the first content signals only (Morrison: see for example, Column 2 Line 35 – 38).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maillard (Patent Number: EP 0912052 A1), hereinafter referred to as Maillard, in view of Morrison (Patent Number: 5815671), hereinafter referred to as Morrison, in view of Wendorf (Patent Number: 5469431), hereinafter referred to as Wendorf, and in view of Takahisa (Patent Number: 5577266), hereinafter referred to as Takahisa.

As per claim 12, Maillard as modified teaches the claimed invention as described above (see claim 1 – 11). Maillard as modified does not disclose expressly disclose wherein the decrypting means is provided as a software module broadcasted by a broadcaster, wherein the software module is executed in the receivers, wherein the software module is regularly changed by the broadcaster.

Takahisa teaches wherein the decrypting means is provided as a software module broadcasted by a broadcaster, wherein the software module is executed in the receivers, wherein the software module is regularly changed by the broadcaster (Takahisa, see for example, Column 14 Line 10 – 15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Takahisa within the system of Maillard as modified because Takahisa teaches an efficient method to extend software download capability to provide the updated system software for use directly by the receiver (Wendorf: see for example, Column 1 Line 59 – 62 and Column 2 Line 64 – 67).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 703-305-0710. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai
Examiner
Art Unit 2131

LBC

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100